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ANALYSIS  
DIVISION

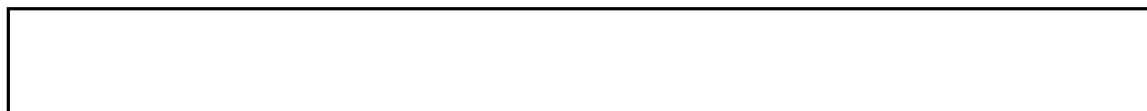
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PHOTOGRAPHIC INTELLIGENCE REPORT

CHINESE POWER PLANTS

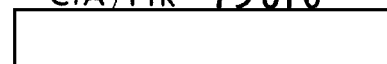
KUANGTUNG PROVINCE

Declass Review by NIMA/DOD



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DATE JULY 1966

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PAGES 29

GROUP 1  
Excluded from automatic  
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CIA IMAGERY ANALYSIS

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## CHINESE POWER PLANTS

### KUANGTUNG PROVINCE

- (A) Chan-chiang Thermal Power Plant
- (B) Ho-yuan Hydro Power Plant (Hsin-feng Chiang)
- (C) Ju-yuan Hydro Power Plant (Nan Shui)
- (D) Kuang-chou Thermal Power Plant (Hsi-tsun)
- (E) Liang-kou Hydro Power Plant (Liu-chi Ho UG)
- (F) Mao-ming Thermal Power Plant
- (G) Tan-hsien Hydro Power Plant (Sung-tao)
- (H) Tung-fang Hydro Power Plant (Lokoshing)
- (I) Wu-shih Thermal Power Plant

### REQUIREMENT

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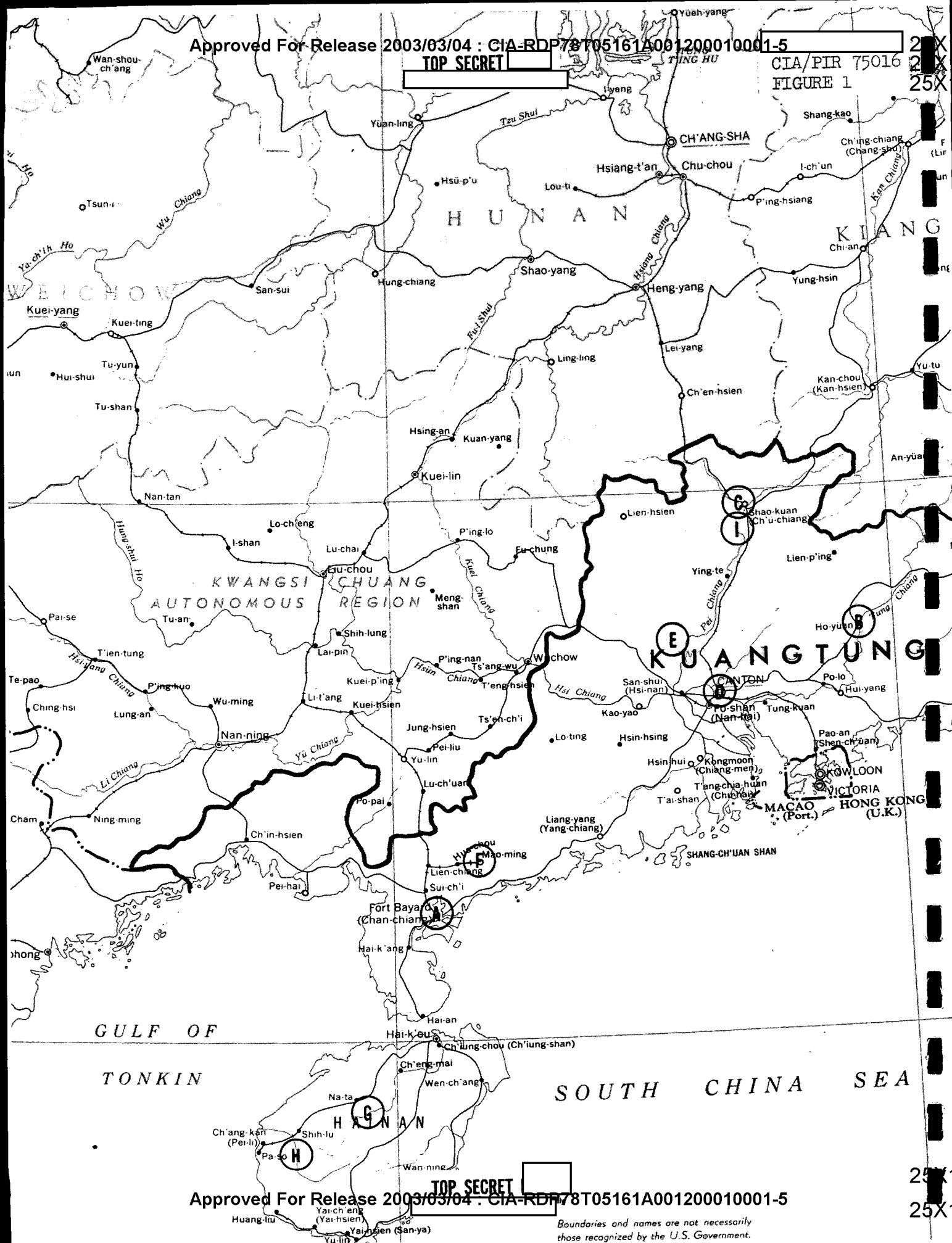
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CHAN-CHIANG THERMAL POWER PLANT

BE NUMBER - [REDACTED]

NPIC NUMBER - 1-J

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The Chan-chiang Thermal Power Plant is located 1.4 nm southeast of Chan-chiang Airfield at 21 12 30N - 110 21 50E. The facility is coal-operated, rail-served, and includes a substation containing one probable transformer, an integrated control house, coal handling and processing facilities, three spray ponds, and numerous support/storage buildings.

The boilerhouse is equipped with two widely spaced flues which connect to free-standing stack A, indicating two boiler units. No generator cable leads were visible, making impossible any evaluation of the generator capacity of the plant. The generator hall is divided into two sections and probably contains at least two generator units.

No new construction occurred during the period [REDACTED]

[REDACTED] The plant was observed in continuous operation until [REDACTED]  
[REDACTED] subsequent coverage was hazy or cloudy,  
which precluded detection of smoke activity.

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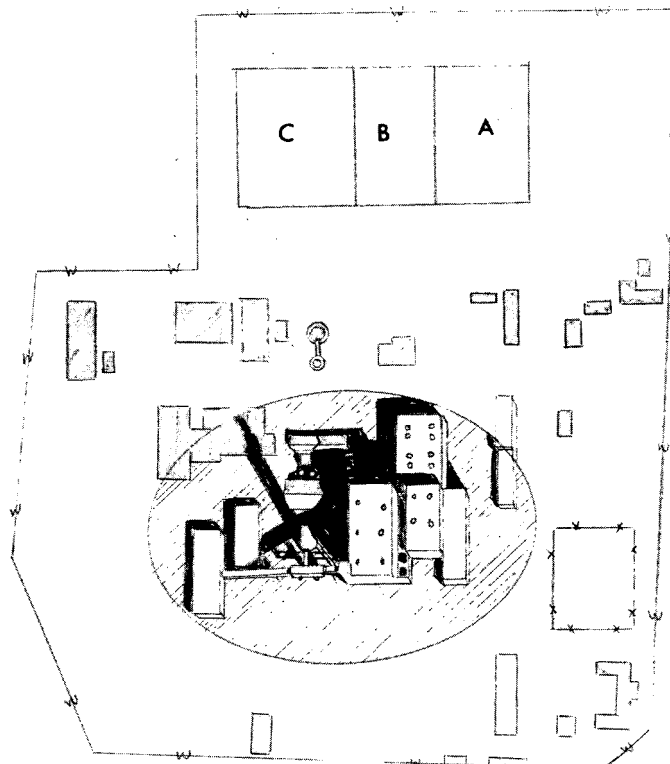
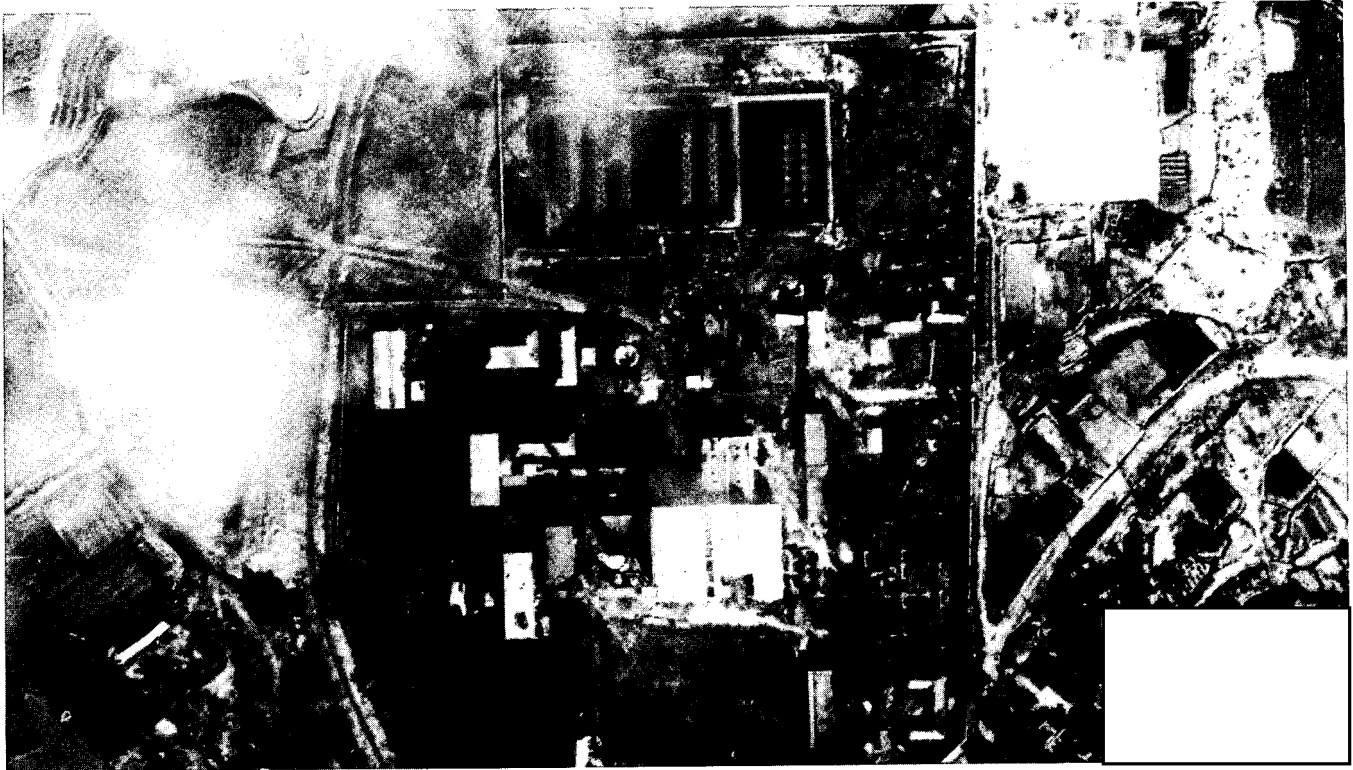
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FIGURE 2

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CHAN-CHIANG THERMAL POWER PLANT



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**B**



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HO-YUAN HYDRO POWER PLANT (HSIN-FENG CHIANG)

BE NUMBER - [REDACTED]

NPIC NUMBER - 74

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The Ho-yuan Hydro Power Plant, located 2.0 nm southwest of Ho-yuan on the Hsiao Chiang (River) at 23 43 40N - 114 39 02E, is of the concrete, consolidated type with an integrated spillway.

The powerhouse is complete except for the installation of transformers behind the southern section of the building. Three transformers are visible adjacent to the center powerhouse section, and two or three others are probably installed under the shelter behind the northern end (turbulence has been observed from this end of the building on several occasions). Some construction apparently remains to be accomplished at the southern end of the dam; temporary buildings, scarring, and a crane were evident in [REDACTED] but little progress, if any, has been noted since that time.

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A large substation containing three transformers is located approximately 1.0 nm northeast of the dam. A series of transmission towers connect the substation with the power plant site; however, lines can only be traced three-fourths of the distance from the substation to the power plant.

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No significant construction occurred during the period [REDACTED]

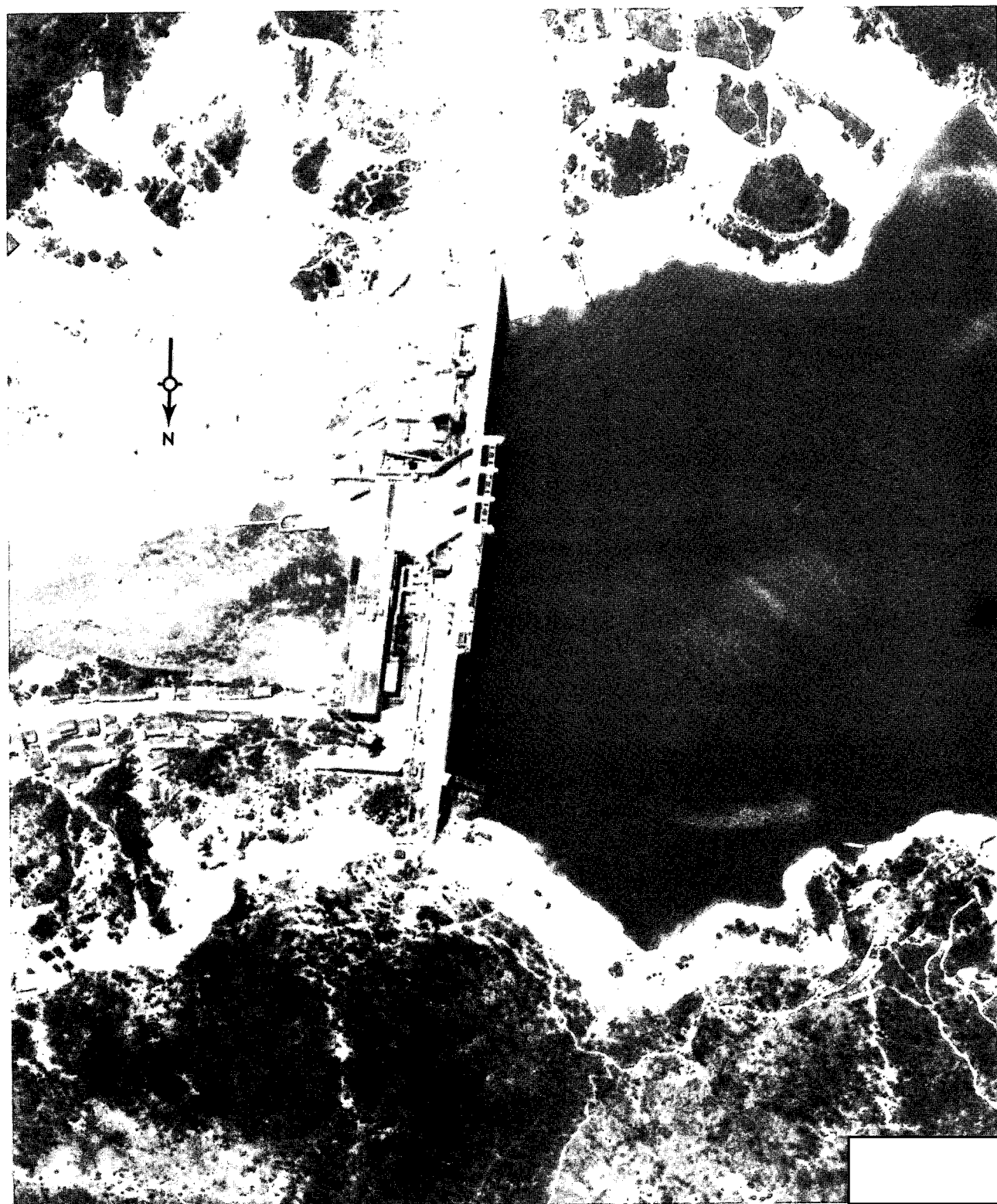
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FIGURE 3

HO-YUAN HYDRO POWER PLANT (HSIN-FENG CHIANG)



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HO-YUAN HYDRO POWER PLANT (HSIN-FENG CHIANG)

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CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
Possible construction activity at the south end of the dam.	No turbulence observed.
No apparent change	Obliquity precludes analysis.
None	One, possibly two areas of turbulence from the plant.
None	Reservoir level is down. One possible area of turbulence from the plant.
None	One area of turbulence from the plant.

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HO-YUAN HYDRO POWER PLANT (HSIN-FENG CHIANG)

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	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	Two areas of turbulence from the plant. Discharge from two spillway outlets also noted.
	None	Two areas of turbulence from the plant. Light discharge from all three spillway outlets.
	None	No turbulence observed; however, poor quality photography may have precluded detection of activity.
	Clouds precluded analysis.	Clouds precluded analysis.

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JU-YUAN HYDRO POWER PLANT (NAN SHUI)

BE NUMBER -

NPIC NUMBER - 141

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The Ju-yuan Hydro Power Plant (Nan Shui) is located on the Nan Shui (River) approximately 19 nm west of Chu-chiang (Shao-kuan) and is still under construction. The facility is of the separated type and presently consists of a probably completed earthen dam at 24 47 20N - 113 13 00E, and scarring for a turbo-generator hall at 24 47 10N - 113 15 30E.

The site of the powerhouse is enclosed by a cofferdam; however, the area within the cofferdam appears to be flooded, suggesting that the site is inactive. There has been no apparent change in the status of the plant

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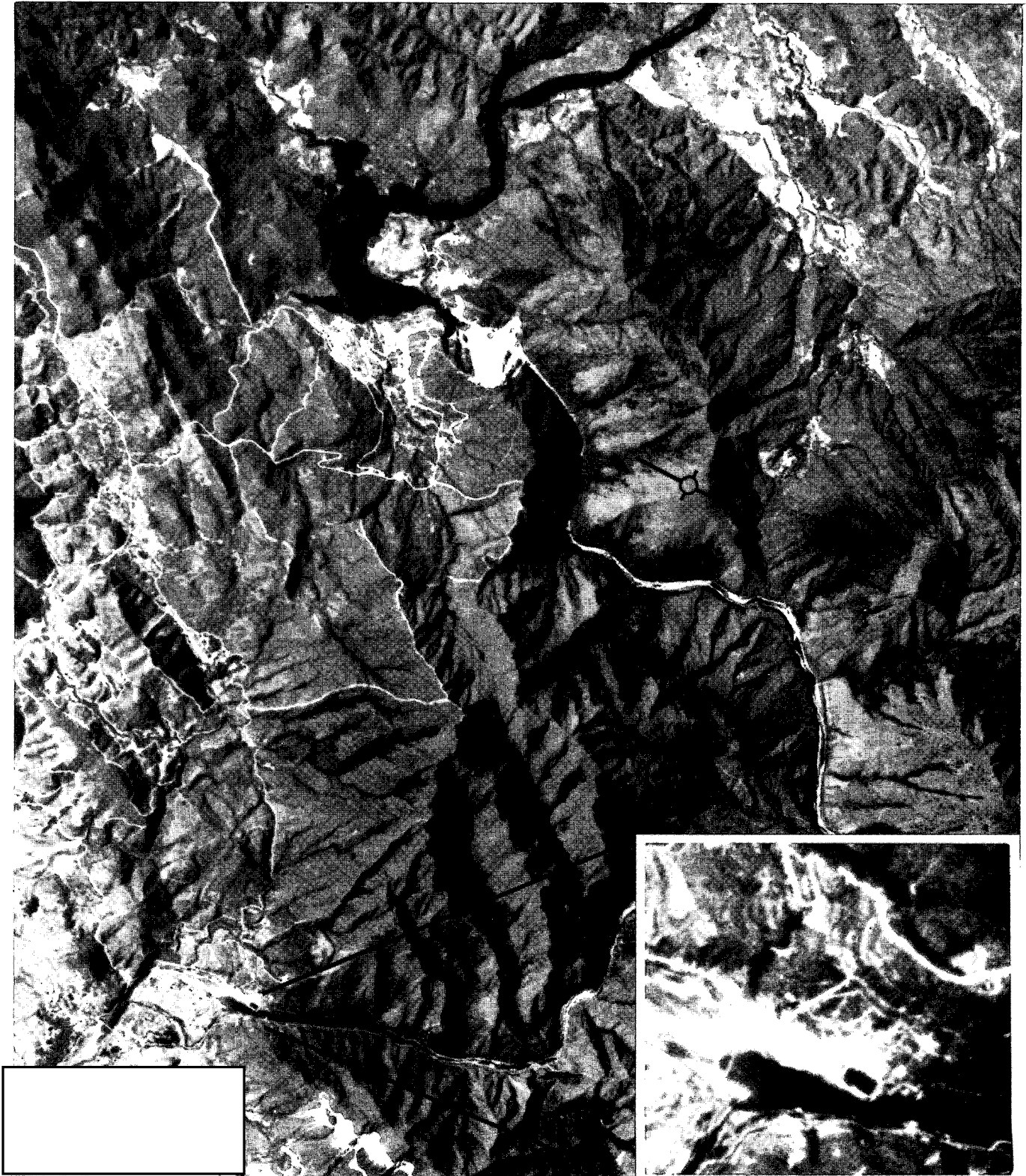
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FIGURE 4

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JU-YUAN HYDRO POWER PLANT (NAN-SHUI)

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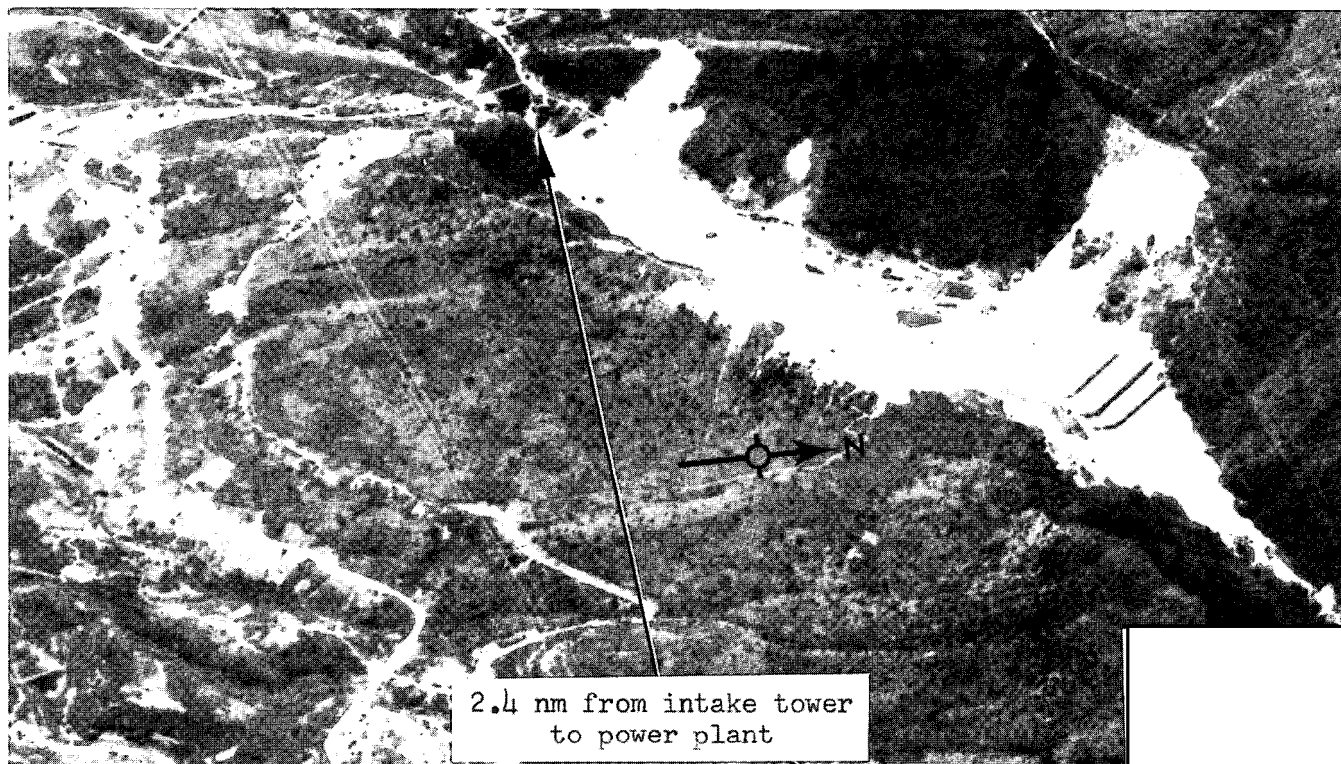
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FIGURE 5

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JU-YUAN HYDRO POWER PLANT (NAN-SHUI)



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KUANG-CHOU THERMAL POWER PLANT (HSI-TSUN)

BE NUMBER - [REDACTED]

NPIC NUMBER - 2-Z7

25X1

Kuang-chou Thermal Power Plant is located in the western sector of Kuang-chou 1.0 nm north of the Kuang-chou Railroad and Highway Bridge over the Chu-chiang (River) at 23 08 30N - 113 13 20E. The facility is coal-operated, rail and water served and includes a control house, substation with three or four transformers, extensive coal storage, processing and conveying facilities and unidentified support/storage buildings.

The boilerhouse consists of two sections which differ considerably in size. The northern, older section has two short roof-stacks (C and D) and appears to contain two boiler units; the southern section is taller, is equipped with two larger roof-stacks and doubtlessly contains two larger boiler units. One set of generator cable leads is visible between the northern generator hall and the substation; three other sets of cables are apparent at the southern section of the generator hall.

There has been no construction during the period [REDACTED]

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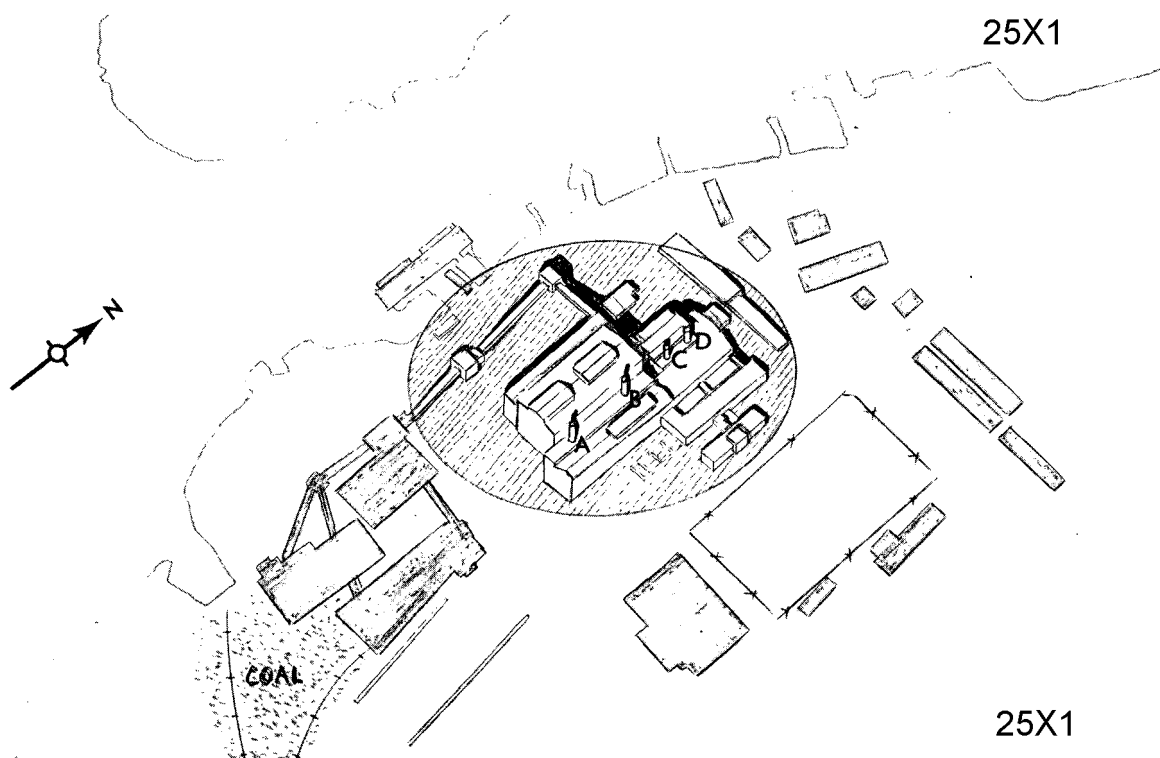
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FIGURE 6

KUANG-CHOU THERMAL POWER PLANT (HSI-TSUN)



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KUANG-CHOU THERMAL POWER PLANT (HSI-TSUN)

CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
None	Moderate smoke from stacks A and B. Light smoke from stacks C and D.
None	Moderate smoke from stack A. Light smoke from stack C.
None	Heavy smoke from stack B. Light smoke from stacks A and D. Possible wisp of smoke from stack C.
None	Heavy smoke from stack B precludes analysis of stacks C and D. Moderate smoke from stack A.
None	Light smoke from stacks A, B, C, and D.

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KUANG-CHOU THERMAL POWER PLANT (HSI-TSUN)

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PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	Moderate smoke from stacks A and B. Light smoke from stack C.

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25X1

LIANG-KOU HYDRO POWER PLANT (LIU-CHI HO UG)

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BE NUMBER - [REDACTED]

NPIC NUMBER - 77

25X1

Liang-kou Hydro Power Plant (Liu-chi Ho UG) is located 1.8 nm north-east of Liang-kou on the Yang-tsun Chiang (River). The facility consists of a concrete-arch dam with two separated water intake facilities at 23 44 59N - 113 46 05E and a separated turbo-generator station at 23 44 40N - 113 45 05E.

The turbo-generator hall is apparently underground, affording no opportunity for an assessment of the number of turbo-generators installed. The above ground facilities include a substation with two large transformers and two possible smaller transformers, a buried surge tank, a control/administration building, and several small support buildings.

No turbulence was observed at the power plant site or dam on any of the missions covering the facility. The only apparent change in plant facilities occurred at the western end of the substation, where two possible transformers were added. [REDACTED]

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MAO-MING THERMAL POWER PLANT

NPIC NUMBER - 57

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The Mao-ming Thermal Power Plant is located within the Mao-ming Shale Oil Plant 14.5 nm south of Mao-ming at 21 40 40N - 110 52 40E. The facility is rail-served, coal-operated, and includes a control house with one transformer, coal-unloading building, coal-conveying and processing facilities, and several support/storage buildings.

25X1 The powerhouse has been in an arrested state of construction since first observed in [ ] and presently consists of housing for one boiler-generator unit. The boilerhouse is equipped with one set of dust-catchers and is connected by one set of two-duct flues to free-standing stack A. The placement of stack A is such that it could serve a total of four boiler units the size of that already installed. One set of generator cable leads connects the generator hall with the control house which is in turn linked to the single transformer.

[ ] The only apparent construction during the period [ ] consisted of the erection of a coal-unloading building.

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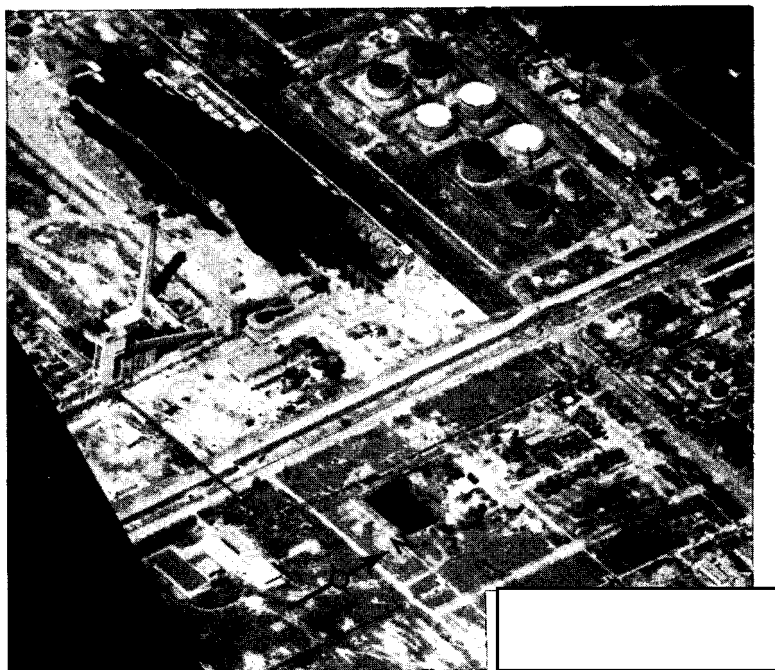
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FIGURE 9

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MAO-MING THERMAL POWER PLANT



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MAO-MING THERMAL POWER PLANT

CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
Powerhouse appears to be one-fourth of planned size; however, no construction activity is apparent.	Clouds preclude analysis.
No apparent activity.	No smoke apparent.
None (one set of generator cables is visible between generator hall and control house.)	No smoke apparent.
None	Clouds preclude analysis.
None	Obliquity/clouds preclude analysis.
None	No smoke apparent.

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MAO-MING THERMAL POWER PLANT

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	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	Uprights for a coal-unloading building are evident.	No smoke apparent.
	Coal-unloading building appears completed.	Light smoke from stack A.
	No apparent change.	Moderate smoke from stack A.

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## TAN-HSIEN HYDRO POWER PLANT (SUNG-TAO)

NPIC NUMBER - 58-A

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An analysis of [REDACTED] failed to locate the Tan-hsien Hydro Power Plant (Sung-tao) at the reported coordinates 19 50N - 110 20E. An additional reference source, Defense Intelligence Agency Bombing Encyclopedia, May 1966, carries the subject facility at 19 24 10N - 108 42 25E. These coordinates would locate the plant approximately 3 nm off the northwest coast of Hainan Island in the Gulf of Tonkin, and are obviously in error.

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A search of northern Hainan revealed one possible candidate for the Tan-hsien Hydro Power Plant (Sung-tao). The facility is located on the Hsin-an Chiang (River) at 19 20 00N - 109 40 30E and consists of a large earthen dam and scarring for a possible turbo-generator hall. There is no indication that any construction activity is currently underway. No other candidates for the subject plant were observed.

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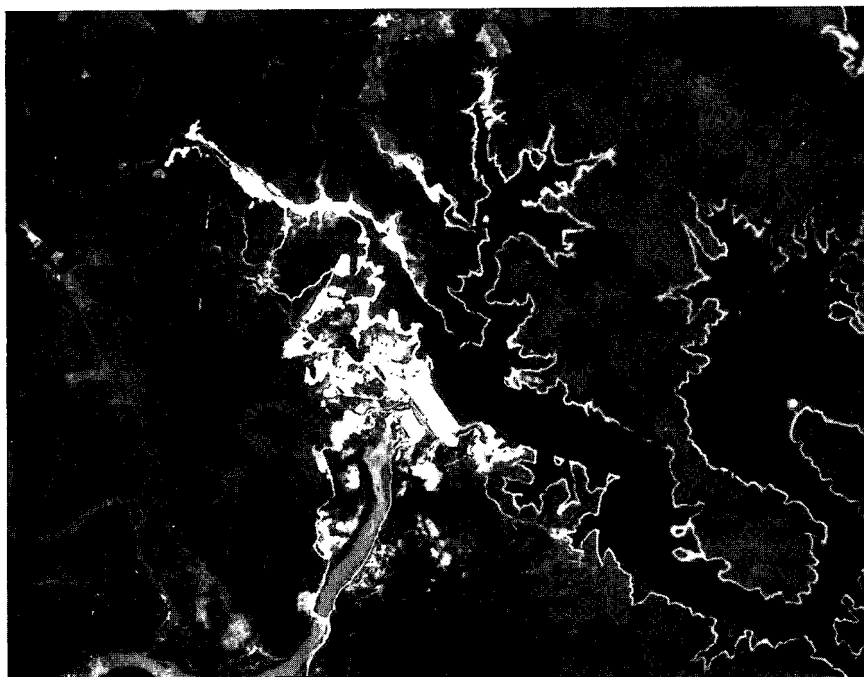
FIGURE 10

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TAN-HSIEN HYDRO POWER PLANT (SUNG-TAO)



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TUNG-FANG HYDRO POWER PLANT (LOKOSHING)

NPIC NUMBER - 18

25X1

Tung-fang Hydro Power Plant (Lokoshing) is located on the south bank of the Chang Ho (River) 1 nm northeast of Lokoshing Dam at coordinates 19 01 55N - 108 59 00E. The powerhouse is serviced by a single penstock which in turn is fed by water from a canal linking with the dam. A substation is located adjacent to the powerhouse and contains a probable small control building, two large transformers, and two possible small transformers.

No new construction or turbulence from the powerhouse was evident  
Several instances of turbulence were noted from  
a small spillway east of the powerhouse.

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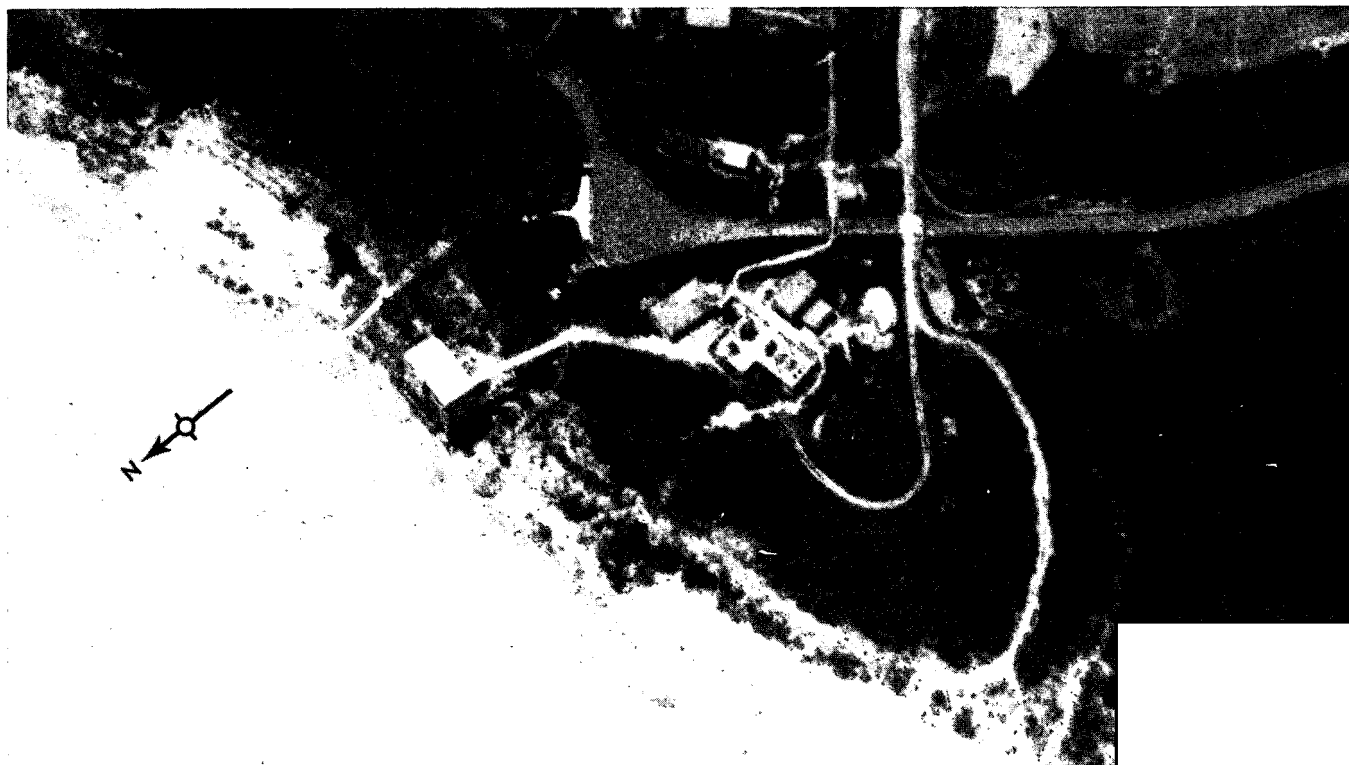
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FIGURE 11

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TUNG-FANG HYDRO POWER PLANT (LOKOSHING)



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WU-SHIH THERMAL POWER PLANT

NPIC NUMBER - 100-B

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The Wu-shih Thermal Power Plant is located approximately 2 nm northwest of Wu-shih on the eastern bank of the Pei Chiang (River) at coordinates 24 35 05N - 113 34 27E. The plant is rail-served, coal-operated and consists of a substation with control house, probable maintenance building, and extensive coal handling and processing facilities.

The boilerhouse is equipped with two dust-catcher units and is connected by two single flues to a masonry stack (A) indicating that two boiler units are probably operable. Only one set of three-cable power leads, however, is visible between the generator hall and substation.

New construction during the period [REDACTED] was limited to the expansion of several buildings in the coal-handling area.

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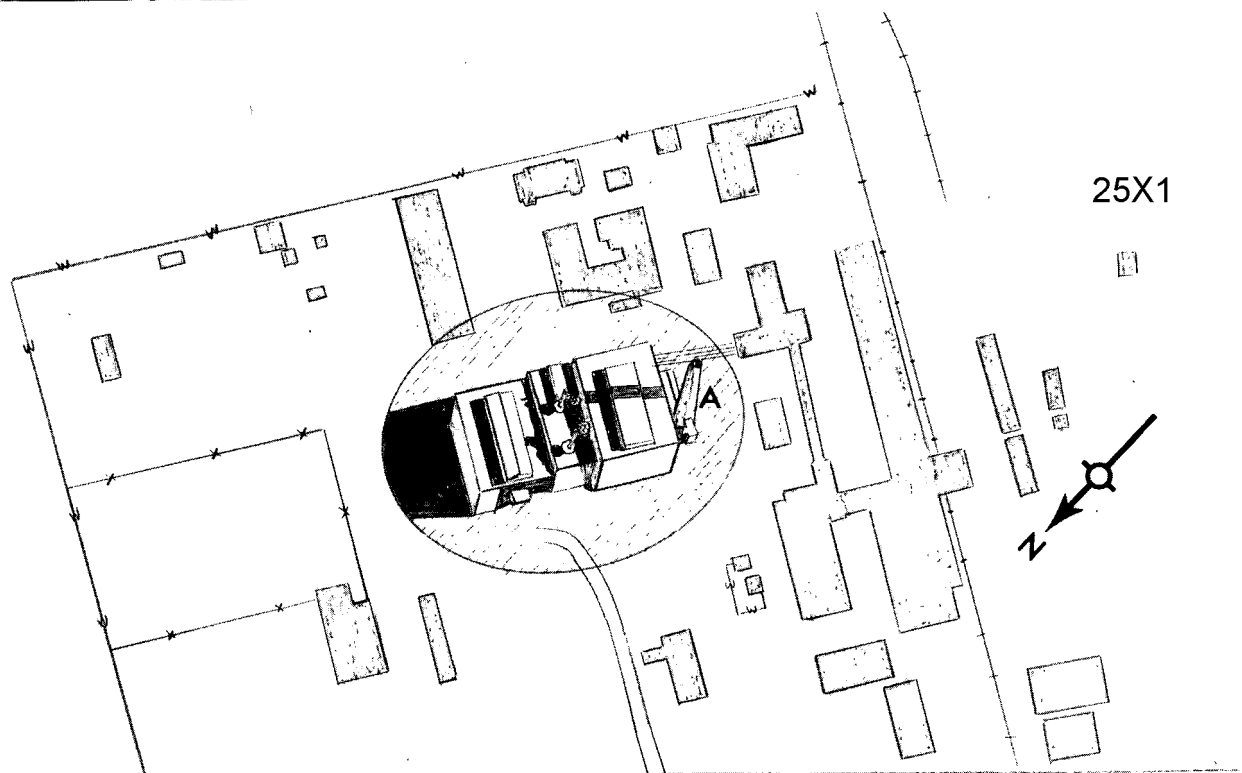
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FIGURE 12

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WU-SHIH THERMAL POWER PLANT



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WU-SHIH THERMAL POWER PLANT

	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	<p>Moderate smoke from stack A.</p> <p>Clouds preclude analysis.</p>
	<p>An addition to several coal unloading buildings has been completed. A possible water tank has been constructed on the hill east of the plant. The northern end of the generator hall is open.</p>	<p>Light smoke from stack A.</p>
	None	<p>Light smoke from stack A.</p>
	None	<p>Light smoke from stack A.</p>

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